

Amendments to the Abstract:

Please replace the Abstract of the instant application with the following:

ABSTRACT

A sensing element for use with a controller adapted to receive input signals corresponding to the sensing element, the sensing element comprising having: a housing defining a conduit adapted to be in fluid communication with a fluid; a pair of sensing arrays disposed within the conduit, the pair of sensing arrays being in a facing spaced relationship to define a gap disposed therebetween; a plurality of sensors disposed on the pair of sensing arrays, the plurality of sensors being adapted to sense and provide signals corresponding to a plurality of parameters of the fluid; a microprocessor adapted to receive the signals of the plurality of sensors, the microprocessor being adapted to determine at least one condition of the fluid upon receipt of the signals corresponding to the plurality of parameters of the fluid.